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APPENDIX

We request that the following data be stored as an appendix in the GSA Repository.

Appendix 1. Analytical Data.

Well No.	Date	Temp. C	pH	Ca (mg/L)	Mg (mg/L)	Sr (mg/L)	K (mg/L)	Na (mg/L)	Tot. Alk. (meq/L)	Cl (mg/L)
A-37	9-24-84	32.0	7.90	42.	100.	----	30.	380.	6.733	720.
A-37	4-13-85	30.0	7.42	62.1	82.5	4.52	29.1	229.8	6.303	400.
A-37	8-10-85	28.0	7.40	55.8	85.8	4.26	35.5	224.2	6.632	390.
P-9	9-24-84	31.0	7.50	74.	6.0	----	0.5	12.	4.276	15.
P-9	4-13-85	29.0	7.27	90.1	6.1	1.22	1.3	20.3	5.327	12.
P-9	8-10-85	26.5	6.84	93.5	6.3	1.26	2.7	11.1	5.252	8.0
P-25	9-24-84	33.0	7.60	60.	7.5	----	0.5	11.	3.776	17.
P-25	4-13-85	29.5	7.72	75.6	6.1	0.90	0.5	10.9	4.182	10.
P-25	8-10-85	26.5	6.95	80.0	6.9	0.91	0.4	10.1	5.135	18.
P-53	9-24-85	30.0	7.70	95.	200.	----	58.	1,600.	3.556	2,900.
P-53	4-13-85	29.0	8.11	51.5	63.8	1.64	11.9	374.0	3.667	580.
P-53	8-10-85	27.0	7.77	37.8	59.5	1.43	10.8	327.6	3.771	530.
D-14	9-24-84	29.0	7.50	130.	13.	----	0.4	20.	7.912	7.1
D-14	4-13-85	28.5	6.71	148.	17.2	1.69	1.8	17.2	8.640	14.
D-14	8-10-85	27.0	6.80	157.	17.8	1.77	0.4	25.9	9.685	17.0
D-31	9-24-84	30.0	7.50	92.	42.	----	1.9	62.	7.692	120.
D-31	4-13-85	28.5	7.41	88.8	31.3	1.95	2.3	69.5	5.870	160.
D-31	8-10-85	27.0	7.03	112.	22.3	1.99	1.7	87.8	7.008	110.
D-49	8-25-85	27.5	7.13	102.	43.9	2.91	1.9	66.7	7.588	89.
D-62	8-27-85	28.5	7.29	62.5	79.3	2.80	5.9	191.4	7.330	320.
D-67	9-24-84	29.0	7.70	290.	960.	----	280.	7,900.	2.498	14,000.
D-67	4-13-85	28.5	7.51	169.	526.	3.15	131.	4,130.	3.563	7,400.
D-67	8-10-85	27.0	7.80	121.	410.	2.71	101.1	3,314.	3.292	5,200.
D-68	9-04-85	27.5	7.08	122.	153.	3.06	34.6	1,028.	7.710	1,800.
D-80	9-06-85	28.0	7.67	366.	1,175.	7.20	317.	10,640.	2.247	18,000.
E-14	9-24-84	30.0	7.50	77.	7.4	----	0.7	7.8	4.735	9.5
E-14	4-13-85	28.5	7.26	75.2	6.6	0.97	0.7	10.9	3.896	20.
E-14	8-10-85	27.0	7.03	74.5	5.8	0.96	0.6	6.5	4.054	12.
E-37	9-25-85	28.5	7.27	63.2	11.1	1.13	0.6	12.2	3.721	24.
E-42	9-24-84	29.0	7.80	44.	24.	----	1.6	36.	4.016	54.
E-42	4-13-85	29.0	8.07	37.3	14.0	0.92	1.4	24.8	3.168	40.
E-48	9-26-85	28.0	7.49	47.9	42.6	2.48	4.2	125.0	4.784	220.
E-55	9-24-84	29.0	7.80	140.	390.	----	150.	2,900.	3.976	5,400.
E-55	4-13-85	28.0	7.89	113.	44.	2.04	24.2	744.	3.820	1,200.
E-55	8-10-85	27.5	8.20	22.9	97.7	0.99	19.0	627.	3.419	1,000.
E-59	9-30-85	28.0	7.72	69.0	108.	2.04	24.3	738.	3.741	1,200.
F-14	9-24-85	30.0	7.60	91.	9.3	----	0.7	15.	4.835	24.
F-14	4-13-85	28.5	7.35	74.7	8.2	0.73	1.4	9.7	6.583	8.5
F-14	8-10-85	27.0	7.14	76.4	8.0	0.64	1.1	6.2	4.414	8.0
F-20	8-14-85	29.5	7.43	88.6	15.5	1.06	2.2	58.1	5.157	88.
F-30	9-24-84	30.0	7.90	74.0	14.	----	2.2	69.	4.496	130.
F-30	4-13-85	29.0	7.40	67.3	16.9	0.73	0.5	14.6	4.592	140.
F-30	8-10-85	27.5	7.10	80.8	14.2	0.90	0.6	12.6	5.121	20.0

Well No.	Date	Temp. C	pH	Ca (mg/L)	Mg (mg/L)	Sr (mg/L)	K (mg/L)	Na (mg/L)	Tot. Alk. (meq/L)	Cl (mg/L)
F-36.5	8-17-85	28.5	7.34	87.7	33.5	1.30	5.3	153.8	5.699	240.
F-40	8-20-85	28.5	7.58	69.8	41.3	1.02	9.2	253.1	4.401	320.
F-45	9-24-85	31.0	7.80	190.	450.	----	140.	3,600.	3.357	6,800.
F-45	4-13-85	28.5	7.27	126.	175.	2.05	47.5	1,481.	5.101	2,400.
F-45	8-10-85	27.5	7.50	110.	153.	1.66	41.6	1,340.	4.633	2,100.
F-52	8-20-85	28.0	7.48	373.	1,173.	10.05	332.0	10,310.	2.584	18,000.
I-10	9-24-85	28.5	7.20	75.	5.7	----	0.6	7.2	4.416	6.0
I-25	9-24-85	28.0	7.40	59.	14.	----	1.4	13.	4.336	12.
I-25	4-13-85	29.5	7.61	80.8	9.3	1.20	0.7	14.5	5.097	19.
I-55	9-24-84	28.0	7.80	150	380.	----	110.	2,800.	4.316	5,300.
I-55	4-13-85	28.0	7.64	75.8	58.7	3.42	11.1	198.	5.110	560.
DW-2	8-22-85	27.5	7.42	147.	218.	2.26	65.8	1,943.	5.782	3,024.
DW-3	8-22-85	28.0	7.34	93.2	60.5	1.11	11.7	421.	5.774	607.8
DW-5	8-22-85	27.5	7.18	139.	16.0	1.59	1.3	109.9	7.629	81.3
DW-9	4-06-85	29.0	7.45	103.	7.8	1.28	1.4	31.9	5.572	30.
DW-10	4-06-85	27.0	7.60	84.5	9.8	1.16	3.4	5.7	4.810	11.
DW-11	4-06-85	28.0	7.40	94.9	6.8	1.04	0.7	6.7	4.386	7.0
DW-13	4-06-85	29.0	7.65	137.	15.1	1.66	8.0	16.8	7.020	22.
DW-14	4-06-85	28.0	7.35	103.	9.5	1.35	1.4	22.8	5.372	25.
DW-16	4-06-85	27.0	7.85	89.7	10.8	1.19	3.2	19.9	5.517	18.
DW-19	4-06-85	27.0	7.40	93.2	6.4	0.92	0.6	25.8	5.125	14.
DW-20	4-06-85	29.0	7.75	95.5	9.0	0.67	1.7	13.6	4.657	14.
DW-22	4-06-85	27.0	7.25	110.	9.3	1.39	0.9	19.8	5.791	18.
DW-24	4-06-84	28.5	7.20	131.	12.7	1.65	2.7	62.3	7.228	70.
DW-25	4-06-85	28.5	7.55	111.	10.8	1.50	0.6	10.1	6.139	10.
DW-26	4-06-85	27.0	7.40	126.	11.1	1.45	0.2	2.2	6.866	3.0
DW-27	4-06-85	29.0	7.40	93.2	8.6	1.12	1.8	23.8	5.944	22.
DW-28	4-06-85	27.0	7.45	111.	13.7	1.15	0.2	19.6	6.110	35.
DW-30	4-06-85	28.5	7.55	81.0	10.2	0.78	2.0	14.1	4.427	20.
DW-31	4-06-85	27.5	7.40	98.3	30.9	1.48	0.8	46.3	6.502	68.
DW-33	8-22-85	28.5	7.04	139.	13.3	1.29	1.2	32.4	6.032	40.5
DW-39	8-22-85	28.0	7.50	83.3	11.5	0.82	0.2	22.2	5.154	20.5
DW-40	8-19-85	27.5	7.15	94.9	7.4	0.92	0.5	11.8	5.183	8.0
DW-42	4-06-85	28.0	7.45	136.	105.	1.70	23.5	865.	6.786	1,300.
DW-43	8-19-85	26.5	6.87	149.	64.9	1.88	7.2	565.	8.479	748.3
DW-46	4-06-85	27.0	7.00	158.	21.6	1.46	0.9	64.3	9.092	60.
DW-48	4-06-85	27.5	7.25	120.	9.0	1.28	1.6	17.8	6.975	22.
DW-49	8-19-85	26.5	7.30	92.3	70.0	1.24	15.7	511.	6.045	704.8
DW-49	8-22-85	27.3	7.51	101.	80.8	1.39	19.6	623.	6.201	888.7
DW-49	8-29-85	27.0	7.28	87.7	64.5	1.28	14.6	464.	5.574	644.0
DW-50	8-19-85	27.0	7.28	87.3	66.4	1.09	10.2	507.	5.273	701.3

Well No.	Date	Temp. C	pH	Ca (mg/L)	Mg (mg/L)	Sr (mg/L)	K (mg/L)	Na (mg/L)	Tot. Alk. (meq/L)	Cl (mg/L)
DW-52	8-19-85	27.0	6.93	139.	13.3	1.44	0.4	42.2	7.844	43.8
DW-53	4-06-85	28.0	7.35	125.	30.6	1.35	4.1	266.	6.710	340.
DW-53	8-19-85	27.0	7.17	120.	93.3	1.46	26.9	604.0	6.826	1,182.
DW-54	4-06-85	27.5	7.25	121.	9.6	1.28	3.0	15.9	6.241	17.
DW-57	8-22-85	28.0	7.14	109.	29.1	1.39	4.8	158.1	6.529	223.
DW-61	4-06-85	29.0	7.40	159.	135.	1.83	39.3	1,217.	6.619	1,800.
DW-62	4-06-85	28.0	7.25	152.	128.5	1.83	38.3	1,145.	7.319	1,800.
DW-65	8-19-85	27.0	6.96	117.	14.5	1.43	1.6	20.9	6.674	33.5
DW-67	8-22-85	26.8	7.68	97.1	57.8	1.41	15.9	506.	4.937	672.8
DW-68	8-22-85	27.5	7.02	115.	56.8	1.77	10.2	369.	7.453	508.9
SW	8-14-85	32.0	8.40	391.	1,249.	7.07	358.	11,860.	2.144	18,130.
SW	8-20-85	30.0	8.26	383.	1,190.	6.98	334.	11,360.	2.272	18,230.

Appendix 2. Percent Seawater, Ionic Strength, Log P_{CO_2}, Saturation Indices, and Source-Rock.

Well No.	Date	% SW	Ionic Strength	Log P_{CO_2}	Saturation Indices SIa	SIc	SId	Source-Rock Ca (mmoles/L)	Mg (mmoles/L)
A-37	9-24-84	3.98	0.032	-2.31	0.45	0.59	1.99	0.66	2.12
A-37	4-13-85	2.20	0.019	-1.85	0.16	0.30	1.14	1.53	3.28
A-37	8-10-85	2.14	0.024	-1.82	0.05	0.20	0.97	1.18	2.45
P-9	9-24-84	0.08	0.007	-2.06	0.28	0.42	0.16	1.84	0.21
P-9	4-13-85	0.07	0.008	-1.75	0.18	0.32	-0.13	2.24	0.25
P-9	8-10-85	0.04	0.008	-1.34	-0.27	-0.13	-1.06	2.33	0.24
P-25	9-24-84	0.09	0.006	-2.20	0.27	0.41	0.35	1.49	0.26
P-25	4-13-85	0.06	0.007	-2.30	0.47	0.61	0.47	1.88	0.25
P-25	8-10-85	0.09	0.008	-1.46	-0.23	-0.09	-0.87	1.99	0.23
P-53	9-24-85	16.02	0.118	-2.47	0.08	0.22	1.48	0.82	0.21
P-53	4-13-85	3.19	0.027	-2.80	0.46	0.60	1.69	0.97	1.02
P-53	8-10-85	2.92	0.025	-2.44	0.02	0.16	0.88	0.66	0.98
D-14	9-24-84	0.04	0.012	-1.82	0.69	0.83	1.06	3.24	0.52
D-14	4-13-85	0.08	0.013	-0.99	-0.02	0.13	-0.29	3.69	0.67
D-14	8-10-85	0.09	0.014	-1.05	0.12	0.26	-0.05	3.91	0.69
D-31	9-24-84	0.66	0.015	-1.83	0.53	0.67	1.40	2.23	1.40
D-31	4-13-85	0.88	0.014	-2.01	-0.13	0.03	-0.46	2.13	0.85
D-31	8-10-85	0.61	0.014	-1.42	0.07	0.21	0.09	2.74	0.61
D-49	8-25-85	0.48	0.015	-1.48	0.16	0.30	0.62	2.53	1.56
D-62	8-27-85	1.76	0.022	-1.66	0.06	0.20	0.90	1.39	2.38
D-67	9-24-84	77.35	0.493	-2.72	0.13	0.27	1.50	-0.27	0.80
D-67	4-13-85	40.70	0.260	-2.32	0.03	0.11	1.14	0.25	1.18
D-67	8-10-85	28.60	0.196	-2.64	0.11	0.25	1.43	0.23	2.49
D-68	9-04-85	9.90	0.073	-1.48	-0.04	0.10	0.70	2.08	1.32
D-80	9-06-85	99.01	0.629	-2.77	0.09	0.23	1.41	-0.52	-1.43
E-14	9-24-84	0.05	0.007	-2.02	0.32	0.46	0.31	1.92	0.28
E-14	4-13-85	0.11	0.007	-1.87	-0.03	0.12	-0.44	1.87	0.22
E-14	8-10-85	0.07	0.007	-1.63	-0.26	-0.12	-0.97	1.85	0.21
E-37	9-25-85	0.20	0.007	-1.90	-0.11	0.03	-0.30	1.56	0.40
E-42	9-24-84	0.30	0.008	-2.40	0.28	0.42	0.98	1.07	0.76
E-42	4-13-85	0.22	0.006	-2.78	0.40	0.54	1.04	0.91	0.47
E-48	9-26-85	1.21	0.014	-2.04	0.01	0.15	0.63	1.08	1.14
E-55	9-24-84	29.83	0.188	-2.55	0.29	0.43	1.73	0.60	1.12
E-55	4-13-85	6.60	0.047	-2.58	0.51	0.65	1.29	2.18	-1.51
E-55	8-10-85	5.50	0.041	-2.95	0.08	0.22	1.46	0.04	1.25
E-59	9-30-85	6.60	0.050	-2.42	0.11	0.25	1.09	1.08	1.13
F-14	9-24-85	0.13	0.008	-2.12	0.48	0.62	0.66	2.26	2.21
F-14	4-13-85	0.05	0.008	-1.74	0.27	0.41	0.25	1.86	0.32
F-14	8-10-85	0.04	0.007	-1.71	-0.11	0.03	-0.54	1.90	0.31
F-20	8-14-85	0.48	0.011	-1.93	0.30	0.44	0.52	2.16	0.40

Well No.	Date	% SW	Ionic Strength	Log P_{CO_2}	Saturation Indices SIa	SIc	SId	Source-Rock Ca (mmoles/L)	Mg (mmoles/L)
F-30	9-24-84	0.72	0.010	-2.46	0.63	0.77	1.24	1.78	0.22
F-30	4-13-85	0.77	0.010	-1.95	0.11	0.25	0.30	1.60	0.31
F-30	8-10-85	0.11	0.008	-1.60	-0.07	0.07	-0.23	2.01	0.53
F-36.5	8-17-85	1.32	0.017	-1.81	0.18	0.32	0.62	2.06	1.25
F-40	8-20-85	1.76	0.020	-2.17	0.19	0.33	0.85	1.57	1.60
F-45	9-24-85	37.57	0.234	-2.62	0.33	0.47	1.77	1.10	-0.28
F-45	4-13-85	13.20	0.094	-1.85	-0.04	0.10	0.75	1.86	0.56
F-45	8-10-85	11.55	0.083	-2.13	0.09	0.23	1.01	1.62	0.49
F-52	8-20-85	99.01	0.622	-2.51	-0.02	0.12	1.18	-0.34	-1.47
I-25	9-24-85	0.07	0.007	-1.97	0.04	0.18	0.25	1.47	0.54
I-25	4-13-85	0.11	0.008	-2.11	0.46	0.60	0.67	2.01	0.33
I-55	9-24-84	29.28	0.184	-2.51	0.34	0.49	1.79	0.90	0.98
I-55	4-13-85	3.08	0.024	-2.17	0.45	0.31	1.18	1.59	0.87
DW-2	8-22-85	16.63	0.118	-1.97	0.17	0.31	1.19	2.05	0.61
DW-3	8-22-85	3.34	0.031	-1.83	0.13	0.27	0.74	2.00	0.81
DW-5	8-22-85	0.45	0.015	-1.53	0.34	0.49	0.42	3.42	0.43
DW-9	4-06-85	0.17	0.010	-1.92	0.42	0.56	0.41	2.55	0.24
DW-10	4-06-85	0.06	0.008	-2.14	0.42	0.36	0.55	2.10	0.37
DW-11	4-06-85	0.04	0.008	-1.97	0.25	0.39	0.02	2.36	0.26
DW-13	4-06-85	0.12	0.012	-2.03	0.81	0.95	1.34	3.41	0.56
DW-14	4-06-85	0.14	0.009	-1.84	0.30	0.44	0.23	2.56	0.32
DW-16	4-06-85	0.10	0.009	-2.34	0.73	0.87	1.20	2.23	0.40
DW-19	4-06-85	0.08	0.008	-1.91	0.28	0.42	0.06	2.32	0.23
DW-20	4-06-85	0.08	0.008	-2.30	0.62	0.76	0.90	2.38	0.36
DW-22	4-06-85	0.10	0.010	-1.71	0.24	0.38	0.07	2.74	0.33
DW-24	4-06-84	0.39	0.013	-1.56	0.34	0.49	0.35	3.23	0.33
DW-25	4-06-85	0.06	0.010	-1.98	0.58	0.73	0.83	2.76	0.42
DW-26	4-06-85	0.17	0.010	-1.80	0.51	0.65	0.62	3.14	0.45
DW-27	4-06-85	0.12	0.010	-1.83	0.36	0.50	0.37	2.31	0.29
DW-28	4-06-85	0.19	0.010	-1.90	0.46	0.60	0.66	2.75	0.47
DW-30	4-06-85	0.11	0.008	-2.11	0.34	0.48	0.44	2.01	0.36
DW-31	4-06-85	0.37	0.012	-1.81	0.37	0.51	0.90	2.42	1.08
DW-33	8-22-85	0.22	0.012	-1.48	0.15	0.29	-0.05	3.45	0.44
DW-39	8-22-85	0.11	0.008	-2.00	0.35	0.49	0.50	2.07	0.42
DW-40	8-19-85	0.04	0.008	-1.65	0.05	0.20	-0.35	2.36	0.30
DW-42	4-06-85	7.15	0.058	-1.90	0.37	0.51	1.30	2.70	0.73
DW-43	8-19-85	4.12	0.041	-1.21	-0.04	0.11	0.23	3.32	0.60
DW-46	4-06-85	0.33	0.016	-1.28	0.28	0.42	0.36	3.91	0.72

Well No.	Date	% SW	Ionic Strength	Log P_{CO_2}	Saturation Indices SIa	SIc	SId	Source-Rock Ca (mmoles/L)	Mg (mmoles/L)
DW-48	4-06-85	0.12	0.011	-1.63	0.35	0.49	0.24	2.98	0.31
DW-49	8-19-85	3.88	0.036	-1.78	0.06	0.20	0.06	1.93	0.93
DW-49	8-22-85	4.89	0.042	-1.98	0.30	0.44	1.76	2.04	0.87
DW-49	8-29-85	3.54	0.033	-1.79	0.00	0.15	0.54	1.84	0.87
DW-50	8-19-85	3.86	0.035	-1.81	-0.03	0.11	0.49	1.80	0.79
DW-52	8-19-85	0.24	0.013	-1.27	0.12	0.26	-0.12	3.45	0.43
DW-53	4-06-85	1.87	0.010	-1.68	0.31	0.45	0.19	3.10	1.17
DW-53	8-19-85	6.50	0.049	-1.61	0.05	0.19	0.66	2.36	0.57
DW-54	4-06-85	0.09	0.010	-1.68	0.31	0.45	0.19	3.01	0.35
DW-57	8-22-85	1.23	0.018	-1.56	0.12	0.26	0.34	2.60	0.58
DW-61	4-06-85	9.90	0.077	-1.86	0.34	0.48	1.30	3.00	0.58
DW-62	4-06-85	9.90	0.075	-1.67	0.20	0.35	1.02	2.83	0.31
DW-65	8-19-85	0.18	0.011	-1.36	0.02	0.17	-0.20	2.90	0.50
DW-67	8-22-85	3.70	0.034	-2.25	0.38	0.53	1.21	2.06	0.52
DW-68	8-22-85	2.80	0.030	-1.40	0.01	0.15	0.38	2.60	0.93
SW	8-14-85	100.00	0.666	-3.64	0.73	0.87	2.73	----	----
SW	8-20-85	100.00	0.651	-3.43	0.64	0.78	2.51	----	----